

Amendment and Response Under 37 C.F.R. §1.116 - Expedited Examining Procedure

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Serial No.: 10/728,577

Confirmation No.: 8901

Filed: 5 December 2003

For: POLYMER COMPOSITIONS WITH BIOACTIVE AGENT, MEDICAL ARTICLES, AND METHODSAmendments to the Claims

This listing of claims replaces all prior versions, and listings, of claims in the above-identified application:

1. (Cancelled)
2. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the microparticles have an average particle size of 1 micron or less when in a substantially nonhydrated form.
3. (Currently Amended) The ~~polymer composition~~ wound dressing of claim 2 wherein the microparticles have an average particle size of 0.5 micron or more when in a substantially nonhydrated form.
4. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the components for the polymer composition further ~~comprising~~ comprise secondary absorbent particles having an average particle size of greater than 10 microns when in a substantially nonhydrated form.
5. (Currently Amended) The ~~polymer composition~~ wound dressing of claim 4 wherein the secondary absorbent particles having an average particle size of greater than 10 microns are superabsorbent.
6. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the microparticles are superabsorbent.
7. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71

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wherein the organic polymer matrix comprises an elastomeric polymer.

8. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 7 wherein the elastomeric polymer is selected from the group consisting of a polyisoprene, a styrene-diene block copolymer, a natural rubber, a polyurethane, a polyether-block-amide, a poly-alpha-olefin, a (C1-C20)acrylic ester of meth(acrylic) acid, an ethylene-octene copolymer, and combinations thereof.

9. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 7 wherein the organic polymer matrix comprises a thermoplastic polymer.

10. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 9 wherein the thermoplastic polymer is a polyolefin.

11. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 7 wherein the organic polymer matrix comprises a hydrophilic polymer.

12. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 11 wherein the hydrophilic polymer is selected from the group consisting of a polysaccharide, a polyether, a polyurethane, a polyacrylate, a polyester, and combinations thereof.

13. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 7 wherein the amine-containing organic polymer microparticles comprises a quaternary ammonium salt of an organic polymer.

14. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 13 wherein the microparticles comprise a cationic homopolymer of the methyl chloride quaternary salt of 2-

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(dimethylamino)ethyl methacrylate.

15. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the components for the polymer composition further ~~comprising~~ comprise an additive selected from the group consisting of a plasticizer, a tackifier, a crosslinking agent, a stabilizer, an extruding aid, a filler, a pigment, a dye, a swelling agent, a foaming agent, a chain transfer agent, and combinations thereof.

16. (Currently Amended) The ~~polymer composition~~ wound dressing of claim 15 wherein the additive is a filler comprising fibers.

17. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the organic polymer matrix comprises a mixture of two or more polymers.

18. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the microparticles are present in an amount of 1 wt-% to 60 wt-%, based on the total weight of the polymer composition.

19. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the composition includes water in an amount of 5 wt-% to 10 wt-%, based on the total weight of the polymer composition.

20. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the polymer composition is in the form of an extruded film.

21. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the polymer composition is in the form of a foam.

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22. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the components for the polymer composition further ~~comprising~~ comprise a foaming agent.

23. (Currently Amended) The ~~polymer composition~~ wound dressing of claim 22 wherein the foaming agent is a physical foaming agent.

24. (Currently Amended) The ~~polymer composition~~ wound dressing of claim 23 wherein the physical foaming agent comprises thermally expandable microspheres.

25. (Currently Amended) The ~~polymer composition~~ wound dressing of claim 24 wherein the polymer composition is stable.

26. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the method further comprises combining the components in the presence of water and removing a substantial portion of the water.

27-59. (Cancelled)

60. (Currently Amended) A method ~~of using a polymer composition~~ comprising applying the ~~polymer composition of claim 1~~ wound dressing of claim 71 to a wound.

61-70. (Cancelled)

71. (Currently Amended) A wound dressing comprising an apertured, liquid permeable substrate and ~~the composition of claim 1~~ a polymer composition preparable by a method

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comprising combining components comprising:

an organic polymer matrix;

an inverse emulsion comprising absorbent hydrophilic microparticles, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the microparticles comprise an amine-containing organic polymer selected from the group consisting of a poly(quaternary amine), a polylactam, a polyamide, and combinations thereof;

a bioactive agent selected from the group consisting of a silver compound, a copper compound, a zinc compound, and combinations thereof, wherein the silver compound has a solubility in water of at least 0.1 gram per liter; and

an optional foaming agent;

wherein the components are combined in a manner to produce a polymer mixture comprising the organic polymer matrix and the microparticles comprising an amine-containing organic polymer, wherein at least a portion of the bioactive agent is incorporated within the microparticles; and

wherein the composition is nonadherent.

72-73. (Cancelled)

74. (Currently Amended) A wound dressing comprising an apertured, liquid permeable substrate and a polymer composition preparable by a method comprising combining components comprising:

an organic polymer matrix;

an inverse emulsion comprising absorbent hydrophilic microparticles, wherein the microparticles when in a substantially nonhydrated form have an average particle size of 10 microns or less, and wherein the microparticles comprise a poly(quaternary amine)-containing organic polymer;

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a bioactive agent selected from the group consisting of a silver compound, a copper compound, a zinc compound, and combinations thereof, wherein the silver compound has a solubility in water of at least 0.1 gram per liter; and

an optional foaming agent;

wherein the components are combined in water in a manner to produce a polymer mixture comprising the organic polymer matrix and the microparticles comprising a poly(quatarnary amine)-containing organic polymer, wherein at least a portion of the bioactive agent is incorporated within the microparticles; and

wherein the composition is nonadherent.

75. (Currently Amended) The ~~polymer composition of claim 1~~ wound dressing of claim 71 wherein the bioactive agent is present in an amount of no more than 3 weight percent based on the total weight of the amine-containing polymer.

76. (Currently Amended) The ~~polymer composition~~ wound dressing of claim 74 wherein the bioactive agent is present in an amount of no more than 3 weight percent based on the total weight of the poly(quatarnary amine)-containing polymer.